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PATENT & TRADEMARK OFFICE

Figure 1

I. Crude cell extract (293 cells)

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II. Anion exchange matrix (Poros® 50 HQ)

separate contaminants, collect telomerase

↓

III. Matrix that binds molecules bearing positive charges (Poros® Heparin 20 HE-1)

separate contaminants, collect telomerase

↓

IV. Affinity agent (Oligo 5)

separate contaminants, collect telomerase

Figure 2

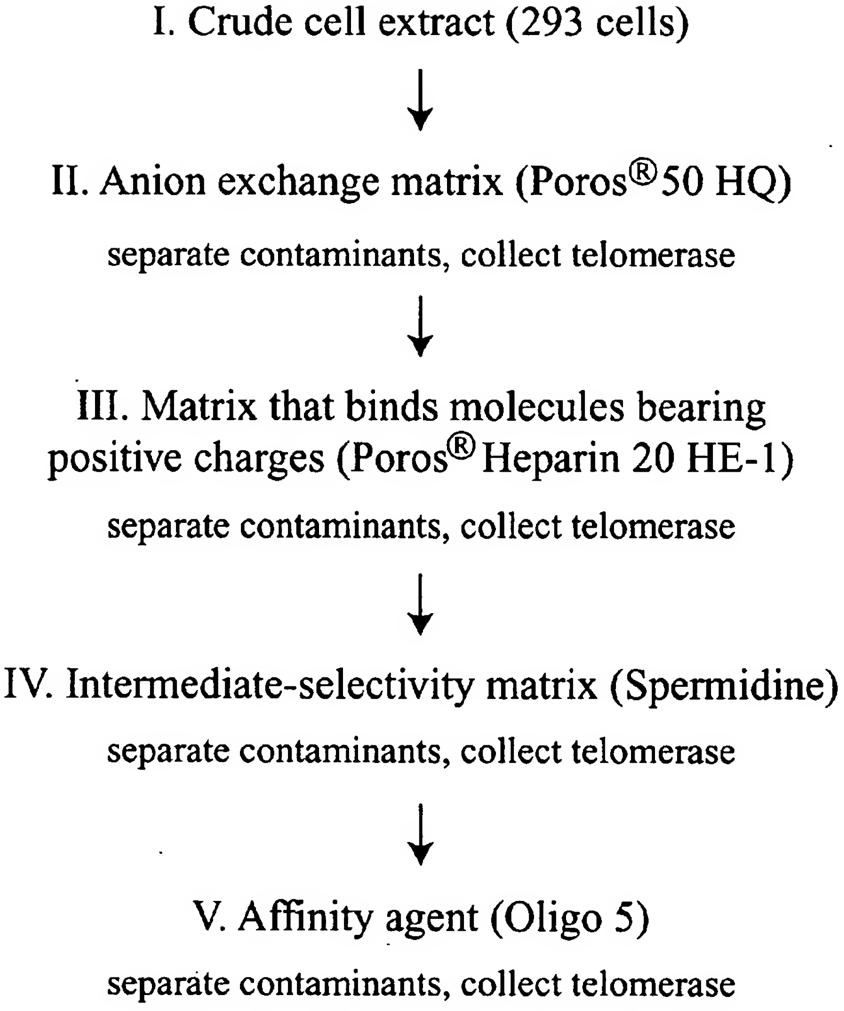

I. Crude cell extract (293 cells)
II. Anion exchange matrix (Poros®50 HQ)
separate contaminants, collect telomerase
III. Matrix that binds molecules bearing positive charges (Poros® Heparin 20 HE-1)
separate contaminants, collect telomerase
IV. Intermediate-selectivity matrix (Spermidine)
separate contaminants, collect telomerase
V. Affinity agent (Oligo 5)
separate contaminants, collect telomerase

Figure 3

I. Crude cell extract (293 cells)

↓

II. Matrix that binds molecules bearing negative charge
(anion exchange matrix) (Poros®50 HQ)

separate contaminants, collect telomerase

↓

III. Matrix that binds molecules bearing
positive charges (Poros®Heparin 20 HE-1)

separate contaminants, collect telomerase

↓

IV. Intermediate-selectivity matrix (Spermidine)

separate contaminants, collect telomerase

↓

V. Separation based on size, shape, or buoyant density
(Gel filtration chromatography - Superose®6)

separate contaminants, collect telomerase

↓

VI. Affinity agent (Oligo 5)

separate contaminants, collect telomerase

Figure 4

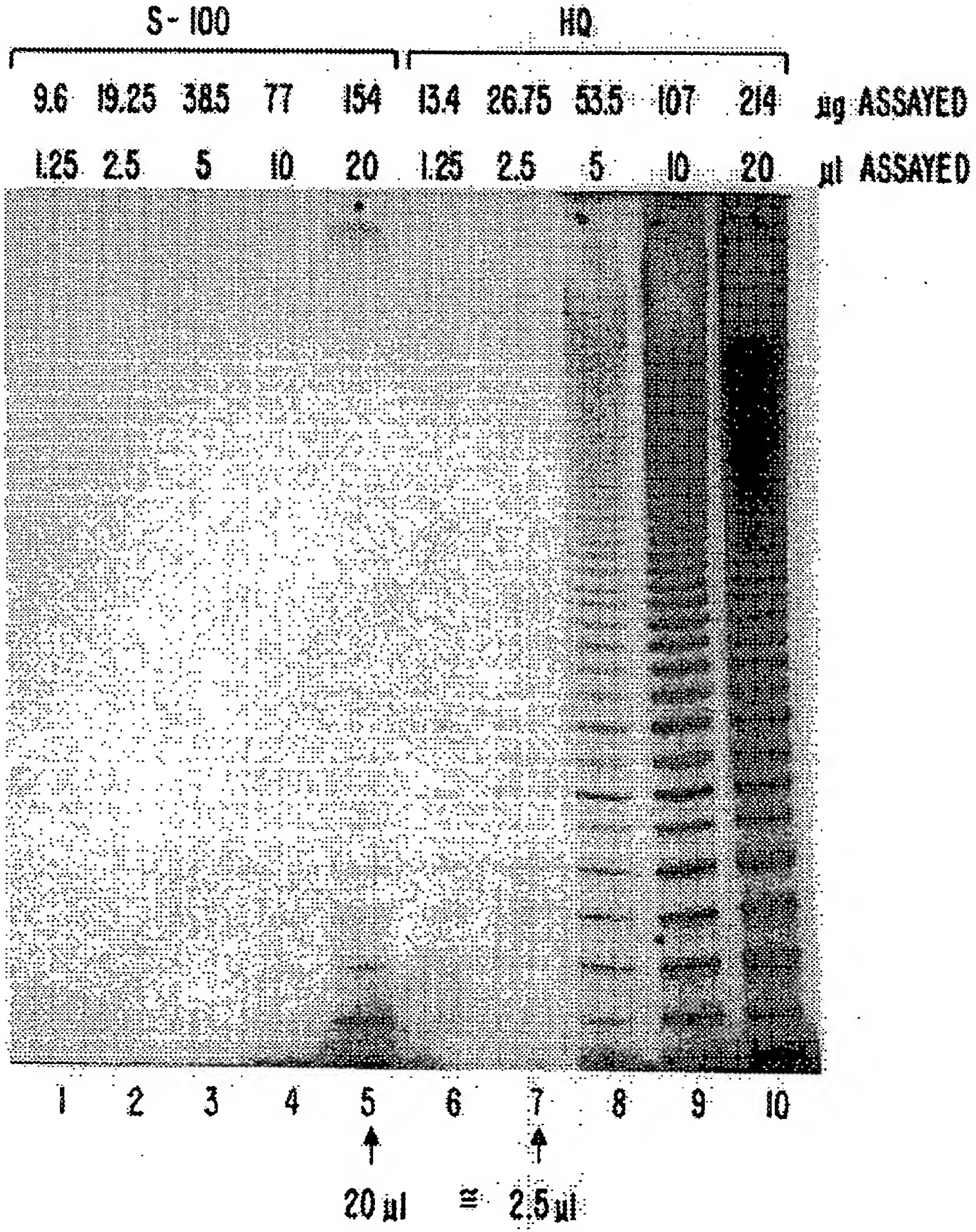

S-100
HQ
9.6 19.25 38.5 77 154 13.4 26.75 53.5 107 214 µg ASSAYED
1.25 2.5 5 10 20 1.25 2.5 5 10 20 µl ASSAYED
1 2 3 4 5 6 7 8 9 10
20 µl ≅ 2.5 µl

Figure 5

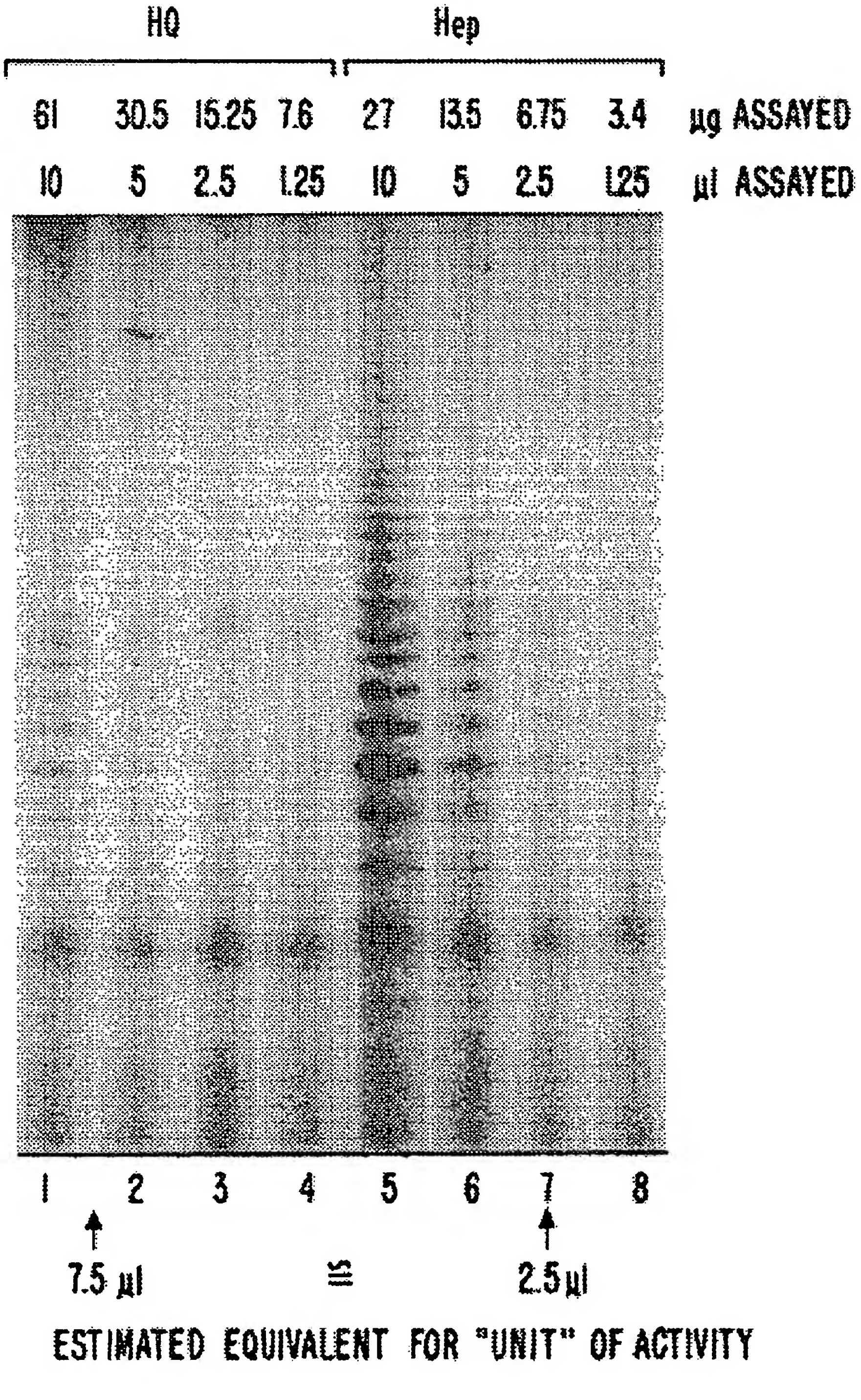

HQ
Hep
61 30.5 15.25 7.6 27 13.5 6.75 3.4 μg ASSAYED
10 5 2.5 1.25 10 5 2.5 1.25 μl ASSAYED
1 2 3 4 5 6 7 8
7.5 μl
≅
2.5 μl
ESTIMATED EQUIVALENT FOR "UNIT" OF ACTIVITY

Figure 6

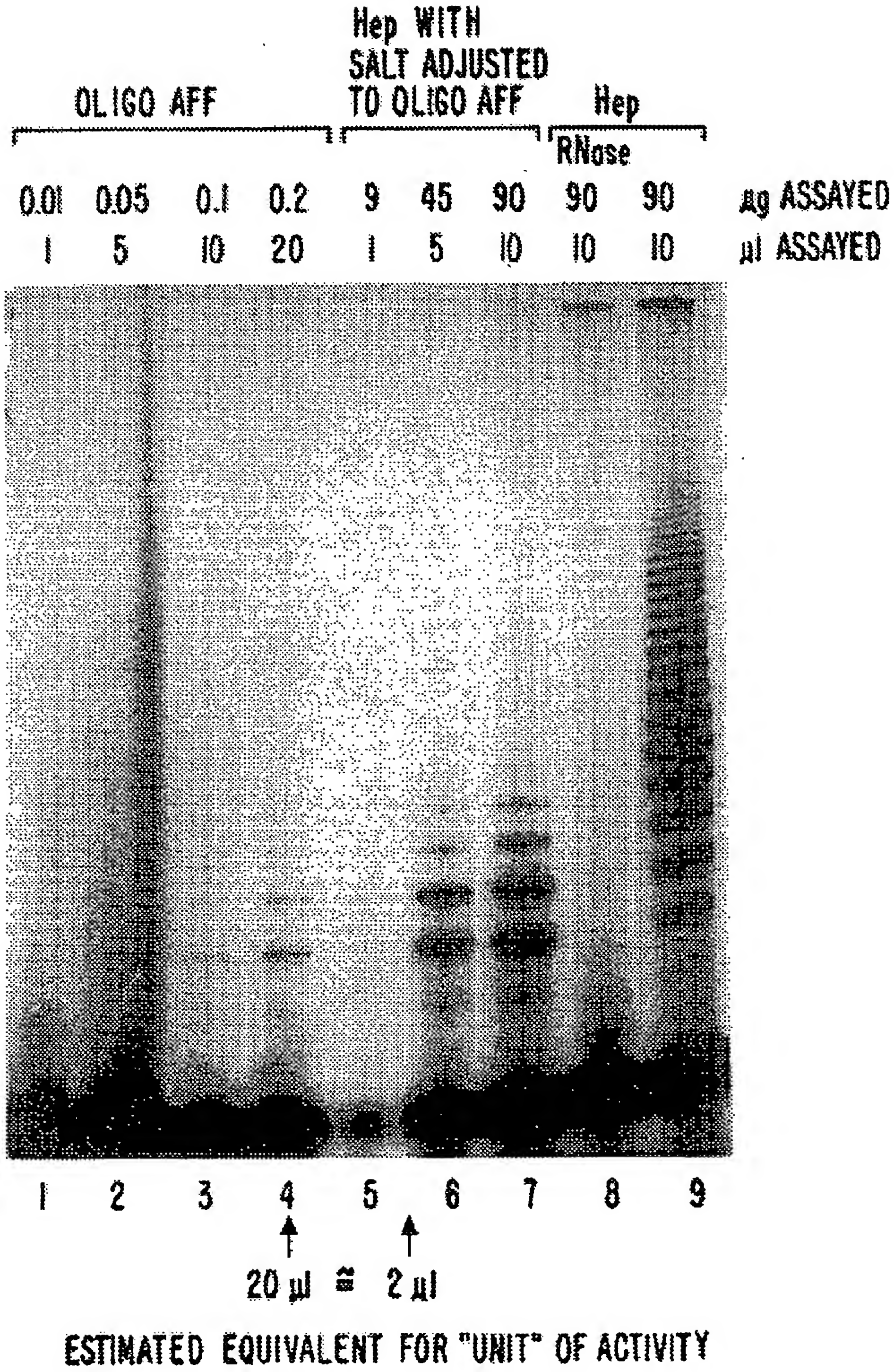
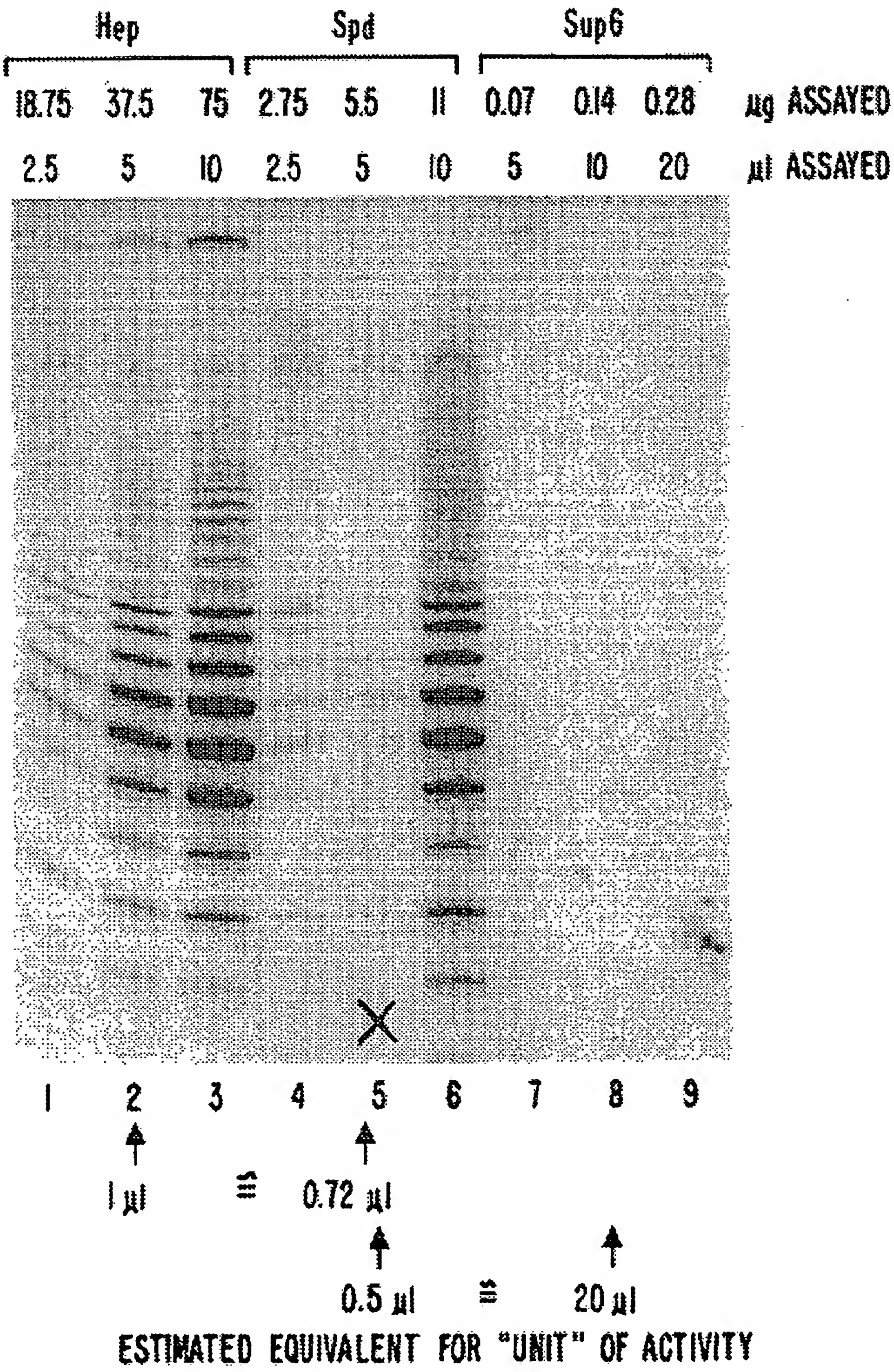

OLIGO AFF
Hep WITH SALT ADJUSTED TO OLIGO AFF
Hep
RNose
0.01 0.05 0.1 0.2 9 45 90 90 90 µg ASSAYED
1 5 10 20 1 5 10 10 10 µl ASSAYED
1 2 3 4 5 6 7 8 9
20 µl ≅ 2 µl
ESTIMATED EQUIVALENT FOR "UNIT" OF ACTIVITY

Figure 7


Hep
Spd
SupG
18.75 37.5 75 2.75 5.5 11 0.07 0.14 0.28 µg ASSAYED
2.5 5 10 2.5 5 10 5 10 20 µl ASSAYED
1 2 3 4 5 6 7 8 9
1 µl ≅ 0.72 µl
0.5 µl ≅ 20 µl
ESTIMATED EQUIVALENT FOR "UNIT" OF ACTIVITY